

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (previously presented). A composite material comprising a particulate biocompatible inorganic apatite filler material and a fibrous polymeric material wherein the fibrous polymeric material comprises molecularly oriented polymeric fibers of maximum dimension 1 mm and a recrystallised melt phase, the fibers and melt phase being of the same polymer and being derived from common molecularly oriented precursor polymeric fibers by melting a proportion of the polymer of the precursor fibers, the recrystallised melt phase consisting of from 5% to 50% by weight of the polymeric material and having a melting point less than that of the molecularly oriented fiber so as to join areas of adjacent fibers to form a network or continuous three dimensional matrix which binds the fibers and filler together.

2 (previously presented). A composite as claimed in Claim 1 wherein the precursor fibre is of maximum length of 0.5mm.

3 (previously presented). A composite material as claimed in Claim 1 being of a substantially void free form.

4 (previously presented). A composite material as claimed in Claim 1 wherein the inorganic filler is up to 60% volume of the material.

5-7 (canceled).

8 (currently amended). A composite material as claimed in ~~Claim 7~~Claim 1 wherein the apatite is hydroxyapatite.

9-10 (canceled).

11 (previously presented). A composite material as claimed in Claim 1 having flexural modulus between 7 and 30 GPa.

12 (original). A composite material as claimed in Claim 11 having flexural modulus greater than 10 GPa.

13 (original). A composite material as claimed in Claim 11 having a flexural modulus greater than 12 GPa.

14 (original). A composite material as claimed in Claim 11 having a flexural modulus greater than 15 GPa.

15 (previously presented). A composite material as claimed in Claim 1 having a flexural strength between 50 and 150 MPa.

16 (original). A composite material as claimed in Claim 15 having a flexural strength greater than 60 MPa.

17 (original). A composite material as claimed in Claim 15 having a flexural strength greater than 80 MPa.

18 (original). A composite material as claimed in Claim 15 having a flexural strength greater than 100 MPa.

19 (previously presented). A composite material as claimed in Claim 1 having a flexural ductility between 0.5 and 10 %.

20 (original). A composite material as claimed in Claim 19 having a flexural ductility between 0.5 and 7%.

21 (original). A composite material as claimed in Claim 20 having a flexural ductility between 0.5 and 4%.

22 (previously presented). A composite material as claimed in Claim 1 wherein the fibrous polymeric material is a polyolefin.

23 (original). A composite material as claimed in Claim 22 wherein the polyolefin is polyethylene.

24 (original). A composite material as claimed in Claim 22 wherein the polyethylene is of high modulus.

25 (previously presented). A composite material as claimed in Claim 1 wherein the recrystallized melt phase of the polymeric material derived from the polymer in a precursor mixture of molecularly oriented polymer fiber and inorganic filler by partial melting thereof to leave molecularly oriented fiber and particulate filler bound together by the said melt phase.

26-61 (canceled).

62 (original). A composite as claimed in Claim 1, wherein the polymeric material is a homo- or co-polymer of a polyolefin.

63 (original). A composite as claimed in Claim 62, wherein the polymer has a weight average molecular weight of 50,000 to 3,000,000.

64 (original). A composite as claimed in Claim 63, wherein the polymer has a weight average molecular weight of 100,000 to 3,000,000.

65 (original). A composite as claimed in Claim 64, wherein the polymer has a weight average molecular weight of 500,000 to 3,000,000.

66 (original). A composite as claimed in Claim 62, wherein the fiber is gel or melt spun fiber.